# MORELAND KIDS RECYCLING BOOK







Full of facts and games for primary school students



**How to** recycle right at home.



Where does your recycling go?

**Tips** on reducing your waste.

What can we do to recycle more?





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#### **QUICK QUIZ**

Using a pencil, draw a line to match some of the words used in this book to their meaning

**Landfill** Items that are made into new products

**Rubbish** Items of rubbish left in an open or public place

Recyclable materials Gets buried in landfill

**Kerbside collection** Bins at the front of your house

**Resource recovery** Saves useful resources from going to landfill

**Contamination** Can be placed into a compost bin

Food waste Items that do not belong in a bin

Litter Where rubbish is buried

For an online copy of this guide please go to moreland.vic.gov.au

For more information on recycling you can visit visy.com.au/recycling/education

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Moreland Recycling Book 2019

## LET'S GET RECYCLING!

Recycling
uses what we
alreaby have
over and over
again!



Recycling is a great way for us to do something good for the environment.

We come in contact with recyclables each and every day so it's important to know how to get recycling right. We can recycle at school, home and at work and if we can teach others how to get it right, we can have a really positive impact on the environment.

#### **RECYCLING AT HOME**

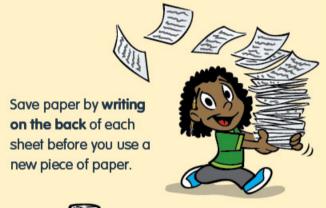
Keep a **recycling checklist** in the house which tells you which items belong in the recycle bin.





Remember to collect your recyclables in a bin **without using** a plastic bag.

#### RECYCLING AT SCHOOL





Always put used paper in your classroom paper bins so they can be **recycled**.

In this book we use these **icons** and **colours** to represent each recycling type.

Using a pencil, draw a line to match them to their recycling name.











Cardboard

Steel

Plastics

Aluminium

Glass



#### TIP

Choosing items at the supermarket that are packaged using recyclable materials means you're an expert recycler!

## WHY IS RECYCLING IMPORTANT?

The choices we make today will have a big impact on the world we live in so it's up to us to recycle right and reduce the amount of waste we create. DID YOU KNOW?

About **20 million tonnes**of rubbish is sent to
Australian landfills
each year?\*

Recycling helps protect our environment by creating new products without having to remove natural resources from the earth. By recycling more we are able to reduce the amount of waste we send to landfill. Landfills create toxic gases called methane which damages our ozone layer. The less waste we send to landfill reduces the amount of methane a landfill produces.

### RECYCLING REDUCES THE NEED FOR LANDFILLS

The less waste sent to landfill reduces the amount of methane produced in the landfill.



#### RECYCLING PROTECTS OUR ENVIRONMENT

If we do not recycle enough at home and at school, these are the natural resources we must take from the earth to make new products:







Apart from trees,
all these raw materials
come from
'non-renewable'
resources.





## RECYCLING IN MORELAND

Recycling right is easy, once you know how!



It's easy to recycle right in Moreland as all households are provided with a recycle bin.

Moreland residents are doing a great job at recycling and you can get involved too.



# Write the name of each type of recyclable that belongs in your recycle bin News \_\_\_\_\_\_ can box \_\_\_\_\_ can bottle bottle

## PAPER AND CARDBOARD



Paper and Cardboard are such a big part of our households. You can recycle cardboard and paper found in the kitchen, bathroom and laundry.

All these paper and cardboard products belong in your recycle bin



Newspapers, junkmail and magazines



**Food boxes** 



Flattened packing boxes



Pizza boxes



**Tissue boxes** 



**Egg cartons** 



Envelopes (even with windows)

#### QUIZ

If one household recycles 1kg of paper and cardboard per week, how many kilograms would they recycle every year?

#### DID YOU KNOW?



You don't need to remove sticky tape from boxes when you put out for recycling as it comes off when the cardboard is washed.



Wire bound books are also recyclable.

#### DO YOU REUSE PAPER IN YOUR CLASSROOM?



**EVEN PAPER** TAKEAWAY BAGS ARE RECYCLABLE!



#### These paper and cardboard products do not belong in your recycle bin



Paper towel



Waxed cardboard boxes





Receipts







You can put paper towel in your compost bin.

DID YOU KNOW?

## I PLASTICS

Hard plastic bottles and containers



**Plastics are such a big part of our households.** You can recycle plastic bottles and containers found in the kitchen, bathroom and laundry.



#### DID YOU KNOW?



You can keep lids on plastic bottles as it's the best way for them to be recycled.

Labels can be left on too.

Even 'hand pump' products can be recycled!



#### PLASTIC BOTTLES CAN BE MADE INTO NEW BOTTLES. HERE'S HOW:

#### 1. Wash and Flake



all pieces.

#### 2. Pelletising

The plastic flakes are heated to melting point and squeezed through an extruder to make pellets.

#### 3. Bottle forming

The pellets are heated and moulded into a new bottle.





















These recycling symbols can be found on most plastic items.

The number in the middle of the triangle tells us what type of plastic it is. It does not tell us whether it can be recycled or not.

#### These plastic products do not belong in your recycle bin







Plastic food wrap



Foam or polystyrene





**Soft plastic** items which you can <u>scrunch in your hand</u> do not go into the recycle bin. Soft plastics can jam the machinery in the recycling sorting process.











Chip and pie packets

#### DID YOU KNOW?

Soft plastics can be taken to your major supermarkets for specialist recycling.



## IGLASS

Bottles and Jars

#### **HANDY HINT**

Bottle and jars don't need to be clean to be recycled. Just make sure most of the food contents are removed before placing in your recycle bin.





Glass containers can be re-used many times and recycled indefinitely.

The energy saved by recycling a single bottle could light a 15-watt
low energy light bulb for 24 hours!\*

All these glass products belong in your recycle bin





Sauce and medicine bottles



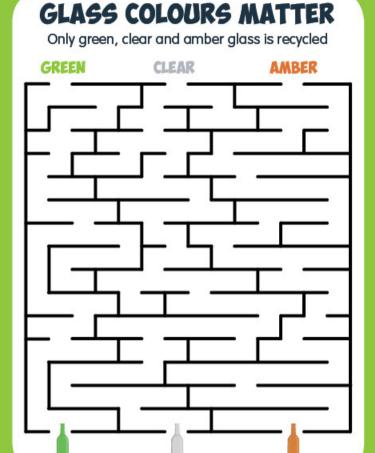
#### HANDY HINT

All glass jars, lids and labels can be left on.

**Drink bottles** 











Try your best to recycle your glass bottles and jars unbroken.





**Drinking glass** 



Pyrex



Ceramic cups and bowls



**Light globes** 



Cooking glassware



Mirror or window glass



Decorative glass





Drink cans, spray cans, trays and foil





Aluminium can be recycled over and over again.

Each can recycled, saves enough energy to run a TV for 3 hours.\*

All these aluminium products belong in your recycle bin



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#### DID YOU KNOW?

All used foil can be recycled just scrunch it into a loose ball so the machines at the MRF don't think it is paper.







\*https://recyclingweek.planetark.org/recycling-info



Food and spray cans



You can leave the labels on your steel cans!





**Steel is a very valuable resource.** Making steel cans from recycled material uses 75% less energy than producing them from raw materials.\*

All these steel products belong in your recycle bin



#### AEROSOL CANS NEED TO BE EMPTY!

Make sure that there is no spray left in the can.

#### NO NEED TO RINSE OUT FOOD CANS!

Just ensure they are as empty as possible.



## WHAT DOES NOT BELONG IN THE RECYCLE BIN?



#### NO RECYCLABLES IN PLASTIC BAGS

Place recycling loosely in your recycle bin



#### NO SOFT, SCRUNCHY PLASTIC BAGS AND FOOD WRAPPERS

Soft plastic items can be taken to dedicated collection bins at the supermarket for recycling



#### **NO BATTERIES**

Household batteries can be taken to a local transfer station for safe disposal



#### NO ELECTRICAL ITEMS

Electrical items can be safely disposed of at a local transfer station



#### NO GARDEN CLIPPINGS

Put all unwanted garden clippings in the food and garden organics bin



#### NO FOOD SCRAPS

Put all food and vegetable scraps in the compost bin



#### NO CLOTHING. SHOES OR FABRICS

ttems that are still in good condition can be taken to your local charity store



#### NO POLYSTYRENE

See Council's A-Z guide\* for disposal options of polystyrene



#### NO TOYS

If your old toys are still in good condition take them to your local charity store so other children can play with them



NO CERAMICS OR DRINKING GLASSES



NO TAKEAWAY CUPS

#### REMEMBER

No soft, scrunchy plastic bags and wrapping. Take soft plastics to your major supermarkets for specialist recycling.

\*www.moreland.vic.gov.au/ environment-bins/a-to-z-guideto-waste-and-recycling/ TIPS ON REDUCING YOUR WASTE

There are many different ways to avoid sending waste to landfill. Here are some handy tips which we can use in our everyday lives to help protect the environment.



Buy products made from recyclable packaging



Buy products in bulk



Make compost from food scraps



Donate unwanted clothing, shoes or blankets



Take your soft plastics to dedicated collection bins at major supermarkets so they can be recycled



DID YOU KNOW

Almost half of all rubbish bin contents is food waste - start composting and reduce waste to landfill.

#### THESE ITEMS GO INTO THE FOLLOWING BINS:







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#### WHAT HAPPENS TO YOUR RECYCLING

#### STEP 1

#### **COLLECT AND SORT**



#### KERBSIDE PICK UP

At your home, a **recycle truck** picks up the recycle bin from outside your house and empties it into the truck.



#### MATERIAL COLLECTION

Material is delivered to a Visy Materials Recovery Facility where a front end loader pushes the material onto the conveyor belt.



#### MANUAL SORTING

The material travels along a **conveyor belt**, which passes by a number of **manual sorters** which remove any obvious contamination.



#### THE MAGNET

A magnet attracts the steel items such as food cans, and separates them from the rest of the material.



#### **AIR CLASSIFIER**

This machine projects a **continuous blast of air** that blows low density, light weight
plastics, aluminium and paper up while
the bottles fall downwards.



#### EDDY CURRENT

A process called Eddy Current, uses a magnet to eject aluminium such as soft drink cans, by repelling it off the conveyor belt down a chute.

#### STEP 2

#### **RECYCLING PROCESS**

Once the recyclables are separated, they are sent for recycling. Recyclables can be used to manufacture new packaging and other products.



PAPER REELS



PLASTIC PELLETS

#### STEP 3

#### MANUFACTURING PROCESS

New products can be manufactured using recyclables.

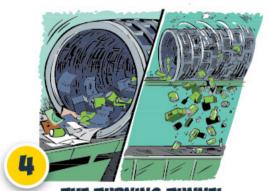


New paper and cardboard



New plastic bottles and containers

#### AFTER YOU PUT THE RECYCLE BIN OUT?\*



#### THE TURNING TUNNEL

It enters a **trommel**, which is like the inside of a constantly turning washing machine with large holes so products such as plastics, glass and metals **drop down** to a lower conveyor belt, leaving paper and cardboard to travel through the trommel.



#### **BOUNCING TRAMPOLINE**

The paper passes over an **inclined conveyor belt** that vibrates.

The heavy items bounce and fall back down the bouncing trampoline and the paper, which doesn't bounce makes it over the top.



#### THE PERFORATOR

The plastic containers continue their journey until they reach the perforator - which punctures and flattens plastic containers by using a series of spikes and spindles.



#### OPTI-SORT

After being flattened, the plastics travel through **infrared light** to detect the type of plastic and **a jet of air transports** the plastics into separate streams.



#### BALES

Each stream is **compressed and baled** into a large cube which is then distributed to Visy sites around Australia and sold overseas to be recycled into new products!



**GLASS CULLETT** 



**ALUMINIUM COILS** 



STEEL COILS



New glass bottles and jars



New aluminium drink cans



New steel food containers

Visy takes your paper, cardboard and plastic recyclables and makes them into new products that contain recycled content. That's called 'closing the loop'.

### RECYCLING ACTIVITIES



#### **BIN IT RIGHT!**

Which bin do these items belong in?





#### **MEMORY TEST**

Put a cross through the items below that DO NOT belong in your recycle bin:



































## QUESTION

1. Do pla	stic bottles and
containe	rs belong in the
recycle b	oin?
O Yes	O No

2. Recyclables placed in plastic
bags, when placed in your
recycle bin, could end up
in landfill?

○ True	○ False
O	O

3. Which of the following items
should we KEEP OUT of our
recycle bin?

O Plastic	bags
-----------	------

0	Polys	yrene	cups	and	trays
---	-------	-------	------	-----	-------

0	Garden	clip	pings
			3

- 4. Lids and labels can be left on plastic bottles when placed into the recycle bin?
- True False
- 5. Aerosol cans must be empty before placing in the recycle bin?
- True False
- 6. Which of the following items belong in your rubbish bin?
- O Plastic bottles
- O Pizza boxes
- O Plastic bags
- O Aerosol cans
- O Paper napkins



#### **WORD FIND**

#### Do you have a keen eye for finding words?

D	Н	Е	٧	J	Р	1	G	W	Α	S	Т	Ε	K	R
S	D	Ν	С	1	L	Т	J	M	Ε	J	D	Н	С	Ε
U	В	٧	L	Н	Α	F	S	R	Ε	U	S	Ε	Ν	D
S	K	1	U	1	S	Т	R	Е	Ε	S	Υ	L	В	U
Т	Ε	R	Ν	В	Т	G	K	С	Х	Ν	R	С	Р	С
Α	Α	0	Р	Т	1	U	Е	Υ	Q	Ε	Ε	Α	Α	Е
1	L	Ν	F	G	С	S	F	С	Ε	W	Q	R	N	D
N	U	M	0	R	Α	С	F	L	Z	S	D	Т	G	M
Α	M	Ε	G	N	Т	Α	Р	Ε	W	Р	F	0	L	Υ
В	1	Ν	W	Ε	Z	N	J	٧	0	Α	Р	Ν	Α	С
L	Ν	Т	0	L	R	S	W	Р	Α	Р	Ε	R	S	Т
Ε	1	Υ	Н	Т	U	M	Α	Q	W	Ε	٧	1	S	Υ
Х	U	1	Q	Т	S	Υ	Т	W	L	R	D	1	U	Р
S	M	R	٧	0	Х	J	Е	٧	K	Н	0	Ν	Α	K
С	Α	R	D	В	0	Α	R	D	С	G	R	Е	Ε	N

ENVIRONMENT	BIN	REUSE
SUSTAINABLE	PLASTIC	RECYCLE
WATER	CANS	ALUMINIUM
TREES	CARTON	GREEN
VISY	REDUCE	WASTE
ENERGY	CARDBOARD	NEWSPAPER
PAPER	BOTTLE	GLASS

#### DO YOU REMEMBER..?

What are these five recyclable materials made from?

\_\_\_\_\_ is made from **trees** 2. Plastics are made from \_\_\_\_\_ oil

4. Steel is made from \_\_\_\_\_ ore

is made from sand, limestone and soda ash

\_\_\_\_\_ is made from **bauxite** 



O All of the above

## LET'S ALL RECYCLE RIGHT!

Let's all recycle right by colouring in the items that do not belong in your recycle bin in **red**. You can then colour in the rest of the picture in whatever colours you like.





